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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,479	09/13/2001	Siegfried Schweidler	PD990014	6074

7590 08/30/2005

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EXAMINER

LI, ZHUO H

ART UNIT PAPER NUMBER

2189

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,479

Applicant(s)

SCHWEIDLER ET AL.

Examiner

Zhuo H. Li

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/6/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in respond to the amendment filed on June 6, 2005. Claims 1-9 are pending in the application.

Information Disclosure Statement

2. The Information Disclosure Statement filed on June 6, 2005 has been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunheroto et al. (US PAT. 6,654,389 hereinafter Brunheroto) in view of Adachi et al. (US PAT. 6,115,425 hereinafter Adachi).

Regarding claim 1, Brunheroto discloses a method for the management of data received via a serial data bus, i.e., local bus (60, figure 1) in a receiving device (9, figure 1), comprising the steps of receiving data transmitted in bus packets having a variable length (col. 4 lines 55-57), each bus packet (75, figure 2) having a header (75a, figure 2) and a payload data field (75b, figure 2), the payload data field being divided into data blocks having a defined length, a combination of a defined number n of data blocks forming a data source packet of fixed length, section-by-section transmission of the data source packet within the framework of data blocks being permitted (col. 4 line 52 through col. 5 line 8 and col. 6 line 34 through col. 8 line 41). Brunheroto differs from the claimed invention in not specifically teaches the steps of carrying out a module- n counting of the data blocks in order to determine the data source packet boundaries, and in that the beginning of a new data source packet is signaled to a memory management device at the beginning of the next counting interval. However, Adachi teaches a transmission device reorganize the variable length coded data, i.e., coded moving picture data, to have a pseudo fixed length via a control circuit (7, figure 1), fixing length circuit (9, figure 1), and buffer (6, figure 1) in the transmission device, in addition, Adachi teaches each of the variable length coded data block have a start point, and the start point is always located on the start point each pseudo fixed data blocks, so as the header and synchronization word to specify the specific group of data block, i.e., start point could be separated each of the data source packet boundaries, (col. 3 line 61 through col. 4 line 52, and col. 5 line 27 through col. 6 line 32),

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furthermore, Adachi teaches the way of calculating the data blocks in response to the code lengths of variable length coded data by the control circuit (col. 8 line 29-63 and col. 4 line 56 through col. 5 line 27), plus, Adachi further teaches a check word adding circuit (31, figure 5) in the transmission device wherein the check word adding circuit incorporate with the multiplexing/check word adding circuit (33, figure 5) having a predetermined constitution as required by calculation to a tail end of the output unit, so that the code length of a single output unit will be a multiple of a predetermined constant (col. 8 line 64 through col. 9 line 26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of the package switching system of Brunheroto in having a steps of carrying out a modulo-n counting of the data blocks in order to determine the data source packet boundaries, and in that the beginning of a new data source packet is signaled to a memory management device at the beginning of the next counting interval, as per teaching by the transmission device of Adachi, because it reduces data losses occurrable due to code errors and a void an accidental bringing-out of information pertain.

Regarding claim 2, Brunheroto discloses each bus packet is subjected to CRC checking and the checking results are buffer-stored in order to be able to ascertain whether a data source packet transmitted in two or more bus packets has been transmitted without transmission errors (col. 9 lines 13-61).

Regarding claim 3, Brunheroto discloses a reference counter reading is transmitted in each bus packet in order to check the completeness of the transmitted data, and in which comparison counting of the received data blocks is effected and, when the data block associated with the reference counter reading is received, the result of the comparison counting is compared

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with the reference counter reading and an error signal is output in the event of non-correspondence (col. 9 line 62 through col. 10 line 4).

Regarding claim 4, the difference between Adachi and the claim is the claim specifically recites number n of data blocks of a data source packet corresponds to the number 8 and the modulo- n counting is correspondingly modulo-8 counting. However, having the number 8 and modulo-8 counting do not have a disclosed purpose nor is it disclosed to overcome any deficiencies in the prior art. As such, the number n of data blocks of a data source packet corresponds may contain any number based on the manufacture required. In addition, Adachi teaches the way to dividing the variable length coded data into the pseudo fixed length blocks (col. 4 line 56 through col. 6 line 9), and the way to calculated the respectively data blocks for the incoming variable length moving picture coded data is vary (col. 8 lines 37-57 and col. 11 lines 31-43). Thus it would have been an obvious matter of design choice to utilize the counting way of Adachi, wherein the counting data blocks are variable, which based on the variable length incoming data, as disclosed supra, since applicant has not disclosed that a number of 8 data blocks and modulo-8 counting, as opposed to other size, overcomes a deficiency in the prior art or is for any stated purpose.

Regarding claim 5, Brunheroto discloses an apparatus for managing data received via a serial data bus in a receiving device comprising a receiver for receiving data transmitted in bus packet having variable length, (col. 4 lines 55-57), each bus packet (75, figure 2) having a header (75a, figure 2) and a payload data field (75b, figure 2), the payload data field being divided into data blocks having a defined length, a combination of a defined number n of data blocks forming a data source packet of fixed length, section-by-section transmission of the data source packet

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within the framework of data blocks being permitted (col. 4 line 52 through col. 5 line 8 and col. 6 line 34 through col. 8 line 41). Brunheroto differs from the claimed invention in not specifically teaches a memory unit to which the received data are written in order and having memory management device, wherein a modulo-n counter is provided, which counts the received data blocks and outputs a data source packet start signal, i.e., start point, to the memory management device at the beginning of the next counting interval. However, Adachi teaches such (col. 4 lines 6-52 and col. 5 line 27 through col. 6 line 32). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Brunheroto in having the memory unit to which the received data are written in order and having memory management device, wherein he modulo-n counter is provided, which counts the received data blocks and outputs a data source packet start signal, i.e., start point, to the memory management device at the beginning of the next counting interval, as per teaching of Adachi, it reduces data losses occurrable due to code errors and a void an accidental bringing-out of information pertain.

Regarding claims 6-7, the limitation of the claims are rejected as the same reasons set forth in claims 2-3.

Regarding claim 8, Adachi teaches discloses the method for the management of the data further comprising a counter, by which the data are counted in particular in units of bytes and which outputs a data block counting signal if the number of data that have been counted are as many as are defined as belonging to a data block (col. 4 line 56 through col. 6 line 9 and col. 8 line 37 through col. 9 line 26).

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6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brunheroto et al. (US PAT. 6,654,389 hereinafter Brunheroto) and Adachi et al. (US PAT. 6,115,425 hereinafter Adachi) as applied to claim 1 above, and further in view of Hatae et al. (US PAT. 6,679,769 hereinafter Hatae).

Regarding claim 9, the combination of Brunheroto and Adachi differs from the claimed invention is not specifically teaches the method for the management of the data wherein the data bus is designed according to the IEEE 1394 standard and the apparatus is part of data link layer module in the interface for this data bus. However, Hatae teaches in the communication system (figure 1) comprising a source node, and destination node, and a controller (300, figure 1) for controlling data communication between the nodes by the transmission link, i.e., bus IEEE1394-1995 with specific communication protocol (col. 7 line 9-54, col. 9 line 24 through col. 10 line 4, and col. 23 lines 29-59). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Brunheroto and Adachi in having the method for the management of the data wherein the data bus is designed according to the IEEE 1394 standard and the apparatus is part of data link layer module in the interface for this data bus, as per teaching by the communication system of Hatae, because it ensures a high speed to transmitting communication data in the network, and inhibiting an increase in a delay time that occurs before data communication is initiated in the data communication network.

Response to Arguments

7. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhuo H. Li whose telephone number is 571-272-4183. The examiner can normally be reached on M-F 9:00am - 6:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zhuo H. Li 

Patent Examiner
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